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JUL 11 2003

TECH CENTER 1600/2900



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/042,417A

DATE: 07/09/2003

TIME: 09:07:02

Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

3 <110> APPLICANT: Pagano, M.
 5 <120> TITLE OF INVENTION: METHODS TO IDENTIFY COMPOUNDS USEFUL FOR THE TREATMENT OF
 PROLIFERATIVE

6 AND DIFFERENTIATIVE DISORDERS
 8 <130> FILE REFERENCE: 5914-090-999
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/042,417A
 11 <141> CURRENT FILING DATE: 2002-01-07
 13 <150> PRIOR APPLICATION NUMBER: 60/260,179
 14 <151> PRIOR FILING DATE: 2001-01-05
 16 <160> NUMBER OF SEQ ID NOS: 92
 18 <170> SOFTWARE: PatentIn Ver. 2.0
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 2151
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Homo sapiens
 25 <400> SEQUENCE: 1

P 6

ENTERED

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 27 tcggcgatta tggaccggc cgagggcggtg ctgcaagaga aggcactcaa gtttatgaat 120
 28 tcctcagaga gagaagactg taataatggc gaacccctta ggaagataat accagagaag 180
 29 aattcaactta gacagacata caacagctgt gccagactct gcttaaacca agaaaacagta 240
 30 tgtagccaa gcactgctat gaagacttag aatttgtgtgg cccaaacaaa acttgccaaat 300
 31 ggcacttcca gtatgattgt gcccagcaa cggaaactct cagcaagcta tgaaaaggaa 360
 32 aaggaactgt gtgtcaaata ctttgagcag tggtcagagt cagatcaagt ggaatttgc 420
 33 gaacatctta tatccaaat gtgtcattac caacatggc acataaaactc gtatctaaa 480
 34 cctatgtgc agagagattt cataactgct ctgccagctc gggatttggc tcataatcgct 540
 35 gagaacattc tgtcataacct ggatgccaat tcactatgtg ctgctgaact tgtgtgc 600
 36 gaatggtacc gagtgacctc tgatggcatg ctgttgc 660
 37 agacagatt ctctgtggag aggccctggc gaacgaagag gatggggaca gtatttttc 720
 38 aaaaacaaac ctctgtacgg gaatgctct cccaaactt tttatagagc actttatcct 780
 39 aaaattatac aagacattga gacaatagaa tctaattggc gatgttggaa acatagttt 840
 40 cagagaattc actgccaaag tggaaacaagc aaaggagttt actgtttaca gtatgtatgt 900
 41 cagaaaatag taagccgc tgcagacaac acaatcaaga tctggatataa aaacacattg 960
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 44 gaaatgctaa acacgttgcatc tcaccattgt gaagcagttc tgcacttgcg ttcaataat 1140
 45 ggcatgtatgg tgacctgctc caaagatcgt tccattgcg tatggatataa ggcctcccc 1200
 46 actgacattt ccctccggag ggtgcgtggc ggacaccgag ctgctgtcaa tggatgtatgt 1260
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 48 agtacttgcg aatttgcg gacattaaat ggacacaaac gaggcattgc ctgtttgcg 1380
 49 tacagggaca ggctggatgt gatgtggc tctgacaaca ctatcagatt atggacata 1440
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 52 gtggctgc tggaccggc tgctccgc gggacactct gtctacggc cttgtggag 1620
 53 cattccggaa gagttttcg actacagttt gatgttgcg tagttcacat 1680

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54 gatgacacaa tcctcatctg ggacttccta aatgatccag ctgcccaagc tgaacccccc 1740
 55 cgttccccctt ctcgaacata cacctacatc tccagataaa taaccatatac ctgacacctat 1800
 56 acttgcccag gaccattaa agttgcggta tttaacgtat ctgccaatac caggatgagc 1860
 57 aacaacagta acaatcaaac tactgccag tttccctgga ctagccgagg agcaggcctt 1920
 58 tgagactcct gttgggacac agttggctcg cagtcggccc aggacggctc actcagcaca 1980
 59 actgactgct tcagtgcgc tatcagaaga tgtcttctat caattgtgaa tgattggAAC 2040
 60 tttaaacct cccctcctct cctccttca cctctgcacc tagtttttc ccattggttc 2100
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 64 <211> LENGTH: 569
 65 <212> TYPE: PRT
 66 <213> ORGANISM: Homo sapiens
 68 <400> SEQUENCE: 2
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 72 Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly Glu Pro Pro Arg Lys
 73 20 25 30
 75 Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr Tyr Asn Ser Cys Ala
 76 35 40 45
 78 Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu Ala Ser Thr Ala Met
 79 50 55 60
 81 Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu Ala Asn Gly Thr Ser
 82 65 70 75 80
 84 Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser Ala Ser Tyr Glu Lys
 85 85 90 95
 87 Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln Trp Ser Glu Ser Asp
 89 100 105 110
 91 Gln Val Glu Phe Val Glu His Leu Ile Ser Gln Met Cys His Tyr Gln
 92 115 120 125
 94 His Gly His Ile Asn Ser Tyr Leu Lys Pro Met Leu Gln Arg Asp Phe
 95 130 135 140
 97 Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His Ile Ala Glu Asn Ile
 98 145 150 155 160
 100 Leu Ser Tyr Leu Asp Ala Lys Ser Leu Cys Ala Ala Glu Leu Val Cys
 101 165 170 175
 103 Lys Glu Trp Tyr Arg Val Thr Ser Asp Gly Met Leu Trp Lys Lys Leu
 104 180 185 190
 106 Ile Glu Arg Met Val Arg Thr Asp Ser Leu Trp Arg Gly Leu Ala Glu
 107 195 200 205
 109 Arg Arg Gly Trp Gly Gln Tyr Leu Phe Lys Asn Lys Pro Pro Asp Gly
 110 210 215 220
 112 Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala Leu Tyr Pro Lys Ile Ile
 113 225 230 235 240
 115 Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg Cys Gly Arg His Ser
 116 245 250 255
 118 Leu Gln Arg Ile His Cys Arg Ser Glu Thr Ser Lys Gly Val Tyr Cys
 119 260 265 270
 121 Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser Gly Leu Arg Asp Asn Thr
 122 275 280 285

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Input Set : N:\EBONY'S\042417A.txt
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124 Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys Lys Arg Ile Leu Thr
 125 290 295 300
 127 Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr Asp Glu Arg Val Ile
 128 305 310 315 320
 130 Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val Trp Asp Val Asn Thr
 131 325 330 335
 133 Gly Glu Met Leu Asn Thr Leu Ile His His Cys Glu Ala Val Leu His
 134 340 345 350
 136 Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys Ser Lys Asp Arg Ser
 137 355 360 365
 139 Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp Ile Thr Leu Arg Arg
 140 370 375 380
 142 Val Leu Val Gly His Arg Ala Ala Val Asn Val Val Asp Phe Asp Asp
 143 385 390 395 400
 145 Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr Ile Lys Val Trp Asn
 146 405 410 415
 148 Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn Gly His Lys Arg Gly
 149 420 425 430
 151 Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val Val Ser Gly Ser Ser
 152 435 440 445
 154 Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys Gly Ala Cys Leu Arg
 155 450 455 460
 157 Val Leu Glu Gly His Glu Glu Leu Val Arg Cys Ile Arg Phe Asp Asn
 158 465 470 475 480
 160 Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys Ile Lys Val Trp Asp
 161 485 490 495
 163 Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala Gly Thr Leu Cys Leu
 164 500 505 510
 166 Arg Thr Leu Val Glu His Ser Gly Arg Val Phe Arg Leu Gln Phe Asp
 167 515 520 525
 169 Glu Phe Gln Ile Val Ser Ser His Asp Asp Thr Ile Leu Ile Trp
 170 530 535 540
 172 Asp Phe Leu Asn Asp Pro Ala Ala Gln Ala Glu Pro Pro Arg Ser Pro
 173 545 550 555 560
 175 Ser Arg Thr Tyr Thr Tyr Ile Ser Arg
 176 565
 179 <210> SEQ ID NO: 3
 180 <211> LENGTH: 1476
 181 <212> TYPE: DNA
 182 <213> ORGANISM: Homo sapiens
 184 <400> SEQUENCE: 3
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 186 acggacttgc agaaaaatga aactctggat cacctgatta gtctgagtgg ggcagtccag 120
 187 ctcaggcatc tctccaataa ccttagagact ctcctcaagc gggacttcct caaactcctt 180
 188 cccctggagc tcagtttta tttgtaaaaa tggctcgatc ctcagacttt actcacatgc 240
 189 tgcctcgct ctaaacatgt gaataagggt ataagtgcct gtacagaggt gtggcagact 300
 190 gcatgtaaaaa atttgggctg gcagatagat gattctgttc aggacgcttt gcactggaag 360
 191 aaggtttatt tgaaggctat tttgagaatg aagcaactgg aggaccatga agccttgaa 420
 192 acctcgatc taattggaca cagtgccaga gtgtatgcac ttactacaa agatggactt 480

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Output Set: N:\CRF4\07092003\J042417A.raw

193 ctctgtacag ggtcagatga cttgtctgca aagctgtggg atgtgagcac agggcagtgc 540
 194 gtttatggca tccagaccca cacttgtca gcggtaagt ttgatgaaca gaagcttgc 600
 195 acaggctcct ttgacaacac tgtggcttc tggaaatgga gttccggagc caggaccag 660
 196 cactttcggg ggcacacggg ggcggattt agcgtggact acaatgatga actggatata 720
 197 ttggtagcg gctctgcaga cttcaactgtg aaagtatggg ctttatctgc tgggacatgc 780
 198 ctgaacacac tcaccggca cacggaatgg gtcaccaagg tagtttgca gaagtgc当地 840
 199 gtcaagtctc tcttgacag tcctggagac tacatcctct taagtgc当地 caaatatgag 900
 200 attaagattt ggccaaattgg gagagaaaatc aactgttaatg gcttaaagac attgtctgtc 960
 201 tctgaggata gaagtatctg cctgcagcca agacttcatt ttgatggcaa atacattgtc 1020
 202 ttagttcag cacttggctc taccatgg gactttgcca gttatgatat tctcagggtc 1080
 203 atcaagactc ctgagatagc aaacttggcc ttgcttggct ttggagatat ctttgcctg 1140
 204 ctgtttgaca accgcttaccc gtacatcatg gacttgc当地 cagagagcct gattagtc当地 1200
 205 tggcctctgc cagagtacag ggaatcaaag agaggctaa gcttcctggc aggcaacat 1260
 206 cctggctgaa tggactggat gggcacaatg acacgggctt ggtcttgcc accagcatgc 1320
 207 ctgaccacag tattcacctg gtgttgc当地 aggagcacgg ctgacaccat gagccaccac 1380
 208 cgctgactga ctttgggtgc cggggctgc当地 gggttgggt gcacctctgc ggcacgc当地 1440
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211 <210> SEQ ID NO: 4

212 <211> LENGTH: 422

213 <212> TYPE: PRT

214 <213> ORGANISM: Homo sapiens

216 <400> SEQUENCE: 4

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 220 Phe Leu Ser Leu Thr Asp Leu Gln Lys Asn Glu Thr Leu Asp His Leu
 221 20 25 30
 223 Ile Ser Leu Ser Gly Ala Val Gln Leu Arg His Leu Ser Asn Asn Leu
 224 35 40 45
 226 Glu Thr Leu Leu Lys Arg Asp Phe Leu Lys Leu Leu Pro Leu Glu Leu
 227 50 55 60
 229 Ser Phe Tyr Leu Leu Lys Trp Leu Asp Pro Gln Thr Leu Leu Thr Cys
 230 65 70 75 80
 232 Cys Leu Val Ser Lys Gln Trp Asn Lys Val Ile Ser Ala Cys Thr Glu
 233 85 90 95
 235 Val Trp Gln Thr Ala Cys Lys Asn Leu Gly Trp Gln Ile Asp Asp Ser
 236 100 105 110
 238 Val Gln Asp Ala Leu His Trp Lys Lys Val Tyr Leu Lys Ala Ile Leu
 239 115 120 125
 241 Arg Met Lys Gln Leu Glu Asp His Glu Ala Phe Glu Thr Ser Ser Leu
 242 130 135 140
 244 Ile Gly His Ser Ala Arg Val Tyr Ala Leu Tyr Tyr Lys Asp Gly Leu
 245 145 150 155 160
 247 Leu Cys Thr Gly Ser Asp Asp Leu Ser Ala Lys Leu Trp Asp Val Ser
 248 165 170 175
 250 Thr Gly Gln Cys Val Tyr Gly Ile Gln Thr His Thr Cys Ala Ala Val
 251 180 185 190
 253 Lys Phe Asp Glu Gln Lys Leu Val Thr Gly Ser Phe Asp Asn Thr Val
 254 195 200 205
 256 Ala Cys Trp Glu Trp Ser Ser Gly Ala Arg Thr Gln His Phe Arg Gly

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Input Set : N:\EBONY'S\042417A.txt

Output Set: N:\CRF4\07092003\J042417A.raw

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259	His Thr Gly Ala Val Phe Ser Val Asp Tyr Asn Asp Glu Leu Asp Ile		
260	225	230	235
262	Leu Val Ser Gly Ser Ala Asp Phe Thr Val Lys Val Trp Ala Leu Ser		240
263	245	250	255
265	Ala Gly Thr Cys Leu Asn Thr Leu Thr Gly His Thr Glu Trp Val Thr		
266	260	265	270
268	Lys Val Val Leu Gln Lys Cys Lys Val Lys Ser Leu Leu His Ser Pro		
269	275	280	285
271	Gly Asp Tyr Ile Leu Leu Ser Ala Asp Lys Tyr Glu Ile Lys Ile Trp		
272	290	295	300
275	Pro Ile Gly Arg Glu Ile Asn Cys Lys Cys Leu Lys Thr Leu Ser Val		
276	305	310	315
278	Ser Glu Asp Arg Ser Ile Cys Leu Gln Pro Arg Leu His Phe Asp Gly		320
279	325	330	335
281	Lys Tyr Ile Val Cys Ser Ser Ala Leu Gly Leu Tyr Gln Trp Asp Phe		
282	340	345	350
284	Ala Ser Tyr Asp Ile Leu Arg Val Ile Lys Thr Pro Glu Ile Ala Asn		
285	355	360	365
287	Leu Ala Leu Leu Gly Phe Gly Asp Ile Phe Ala Leu Leu Phe Asp Asn		
288	370	375	380
290	Arg Tyr Leu Tyr Ile Met Asp Leu Arg Thr Glu Ser Leu Ile Ser Arg		
291	385	390	395
293	Trp Pro Leu Pro Glu Tyr Arg Glu Ser Lys Arg Gly Ser Ser Phe Leu		
294	405	410	415
296	Ala Gly Glu His Pro Gly		
297	420		
300	<210> SEQ ID NO: 5		
301	<211> LENGTH: 1407		
302	<212> TYPE: DNA		
303	<213> ORGANISM: Homo sapiens		
305	<400> SEQUENCE: 5		
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307	gtgaccgtaa ttcatcagaa gaaggaactg cagagaaatc caagaaactg aggactacaa 120		
308	atgagcattc tcagacttgt gattgggtt atcccttca ggacattatt ctccaagtat 180		
309	ttaaatattt gccttctt gaccggctc atgttcaca agtttgcgc aactggacc 240		
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311	catcttattt gaaagctacc catccagagc tgatcaaaca gattattaaa agacattcaa 360		
312	accatctaca atatgtcagc ttcaagggtt acagcagcaa ggaatcagct gaagcagctt 420		
313	gtgatatact atcgcaactt gtgaattgtt cttaaaaaac acttggactt attcaactg 480		
314	ctcgaccaag ctttatggat ttaccaaagt ctcactttat ctctgcactg acagttgtgt 540		
315	tctgtaaactc caaatccctg tcttcgttta agatagatga tactccagta gatgtatccat 600		
316	ctctcaaagt actagtggcc aacaatagtg atacactcaa gctgttggaaa atgagcagct 660		
317	gtcctcatgt ctctccagca ggtatccccc gtgtggctga tcagtgtcac ggcttaagag 720		
318	aacttagccct gaactaccac ttatttgatg atgagttgtt acttgcattt tcttctgaaa 780		
319	aacatgttcg attagaacat ttgcgttgg atgtatgtcag tgagaatcct ggacagacac 840		
320	acttccatac tattcagaag agtagctggg atgtttcat cagacattca cccaaagtga 900		
321	acttagtgat gtatttttt ttatatgaag aagaatttga ccccttctt cgctatgaaa 960		
322	tacctgccccac ccatctgtac tttggggagat cagtaagcaa agatgtgtt gggcggtgg 1020		

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:26; Xaa Pos. 218,556,630
Seq#:29; N Pos. 13,47,68,88,270
Seq#:30; Xaa Pos. 15,22,28,89
Seq#:37; N Pos. 45,329,332
Seq#:38; Xaa Pos. 110,111
Seq#:51; N Pos. 1733
Seq#:52; Xaa Pos. 576,586
Seq#:53; N Pos. 348
Seq#:54; Xaa Pos. 150,309,340,374
Seq#:59; N Pos. 471